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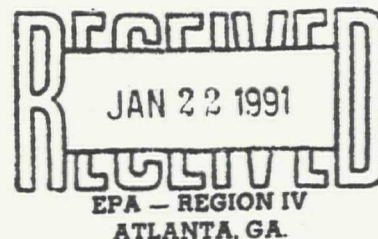
Toney Graham, Jr., MD  
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Promoting Health, Protecting the Environment

January 15, 1991



Jon Bornholm  
Remedial Project Manager  
U.S. EPA, Region IV  
345 Courtland Street  
Atlanta, GA 30365



RE: Medley Farms Draft RI Report

Dear Mr. Bornholm:

As requested, SCDHEC has reviewed the above referenced report. The comments from the Hydrogeology Section are attached. Site Engineering's comments follow:

**GENERAL COMMENTS:**

According to the document, "Guidance on Remedial Action for Superfund Site with PCB Contamination," by the Office of Emergency and Remedial Response of August 1990, the starting point action level for soils is 1 ppm for sites where residential land use is assumed. PCB concentrations range from 0.667 to 5.379 ppm in the Test Pits and 0.200 to 1.900 ppm in surface soil samples. The concentration of PCBs in the soil above which some type of action should be considered should be evaluated in the baseline risk assessment. The risk range for superfund sites is  $10^{-4}$  to  $10^{-6}$  individual excess cancer risk. Based on the standard risk assessment of ingestion, inhalation, and dermal contact, a concentration of 1 ppm PCB equates to a  $10^{-5}$  risk. This is assuming no soil cover or management controls. Although the PCB concentrations are somewhat low, the risk of PCB contamination at the site should be addressed in the Feasibility Study.

Isoconcentration maps to delineate total VOCs concentrations in the monitoring wells should be provided.



**SPECIFIC COMMENTS:**

**Page 2, Section 1.0, 4th Paragraph**

This paragraph should state the fact that SCDHEC did not approve of the RI/FS Phase II Work Plan.

**Page 5, Section 1.0, 1st Paragraph**

Why was the background soil samples not analyzed for VOCs during Phase I of the RI?

**Page 6, Section 1.0, 5th Bullet**

Groundwater was not encountered in two bedrock wells. These wells should be identified in this bullet, ie ... BW111 and BW112.

**Page 7, Section 1.0, 2nd Paragraph**

Since BW105 showed decreasing contamination with increasing depth, why was BW111 and BW112 installed?

**Page 7, Section 1.0, 3rd Paragraph**

The two background wells are BW1 and SW1, not SW1 and SW2 as listed.

**Page 8, Section 1.0, 4th Bullet**

See General Comment on PCBs.

**Page 12, Section 2.1.1, 2nd Paragraph**

This paragraph states that Phase II began August 8, 1990, but the Executive Summary states that work began in July. Work proceeded without consent of the State.

**Page 17, Section 2.1.3**

SW2 is referenced twice in this paragraph when SW2 does not exist.

**Page 28, Section 2.23, 1st Paragraph**

The paragraph should state that the four private wells (Sprouse, Sarrett, Davis, Pitman) are located on Figure 2.5.

**Page 42, Section 3.3.1**

The rationale for TP15 is not included with list of location selection rationale for the Test Pits.

**Page 51, Section 3.4.1, 1st Paragraph**

First sentence should read "surface soils sampled."

**Page 52, Section 3.4.2, 1st Paragraph**

Since PCB sampling was added after the Phase II work plan was approved by EPA, an explanation of the sampling method used to collect and analyze the PCB samples should be included in the document.

**Page 65, Section 3.7.1**

The document needs to state that SW2 was the well not installed.

**Page 66, Section 3.7.1**

Explain the reasoning why a well pair was not installed at well site 104, when according to the work plan BW104 should have been installed with SW104. Explain the reasoning why BW107 was not installed, since the work plan called for site 107 if contamination was found in site 106. Rationale was not presented for well pairs 108 and 109.

**Page 74, Section 3.8.2**

Paragraph should state BW105 was not water pressure tested due to the construction of the well.

**Page 75, Section 3.8.2, Last Paragraph**

Since BW111 and BW112 are not water bearing wells and are "deep" wells, should their hydraulic conductivities be included with the range for bedrock wells? Why run a water pressure test on these wells when they do not produce water?

**Page 77, Section 3.8.3, Last Paragraph**

The range of hydraulic conductivities should be  $3.05 \times 10^{-5}$  to  $2.96 \times 10^{-3}$  for saprolite wells based on Table 4.1.

**Page 79, Section 3.9.4, 1st Paragraph**

The samples of the four new wells were submitted for quick turn around, non-CLP. The next sentence states the samples were analyzed with full CLP protocols. Please explain these statements.

**Page 83, Section 3.11.3**

The location of staff gauges are shown on Figure 3.2, not Figure 3.4.

**Page 90, Section 4.2.1, 1st Paragraph**

The range of saprolite hydraulic conductivities should be listed in this paragraph. Present the reason a slug test was not performed on SW101.

**Page 90, Section 4.2.1, 2nd Paragraph**

BW111 and BW112 should not be included with the range of bedrock hydraulic conductivities. Sirrine did not include BW111 and BW112 when calculating the average hydraulic conductivity on page 102.

**Page 96, Section 4.2.2, 4th Paragraph**

There is no hydrograph provide for well pair 109.

**Page 108, Section 5.2, 1st Paragraph**

See PCB General Comment

**Page 119, Section 5.4.1**

Methylene chloride needs to be added to list of VOCs detected.

**Page 121, Section 5.5.1**

Vinyl chloride was also detected in HA2, HA3, and HA4, not just in HA5.

**Page 125, Section 5.6.1**

The concentrations of notable occurrences of VOC contamination should be included in the paragraph.

**Page 151, Section 6.0, 3rd Paragraph**

See General Comment concerning PCBs.

**Page 154, Section 6.4, 1st Paragraph**

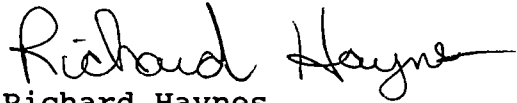
Listed under wells detected with trace levels of VOCs is BW101. This well does not exist. Also, in section 5.7.1 measurable concentrations are stated to exist in BW3, SW101, SW103, SW104, and BW105, but these wells are not listed under trace levels detected in this section.

**Page 159, Section 7.0, Conclusion 1**

Groundwater contaminants were detected beneath the site and downgradient of the disposal area.

The State looks forward to working with you to ensure the remediation of this site. If you have any questions, please call me at (803)734-5487.

Sincerely,

A handwritten signature in cursive script that reads "Richard Haynes". The signature is written in dark ink and is positioned above the printed name and title.

Richard Haynes  
Site Engineering Section  
Bureau of Solid and Hazardous  
Waste Management

RH/njw

cc: Keith Lindler  
Angela Gorman  
Cindy Mason